



UNITED STATES MARINE CORPS  
FACILITIES DEPARTMENT, MARINE CORPS BASE HAWAII  
BOX 63082 KANEHOE BAY, HAWAII 96863-3082

0110078  
MR  
IN REPLY REFER TO:  
5090  
LF/026-14j  
February 26, 2014

Clean Water Branch  
Environmental Management Division  
Hawaii Department of Health  
919 Ala Moana Blvd., Room 301  
Honolulu, HI 96814-4920

2014 FEB 27 1:32 PM / p

SUBJECT: DRAFT NPDES PERMIT HI0110078

Enclosed are comments regarding draft NPDES Permit HI0110078 issued to the Marine Corps Base (MCB) Hawaii Water Reclamation Facility (WRF), and the Affidavit of Publication for the January 30, 2014 Public Notice. Should you have any questions, please contact Mr. Jeff Larson of our Environmental Department at 257-6999.

Sincerely,

A handwritten signature in black ink, appearing to read "L. H. Yamamoto".

L. H. YAMAMOTO  
Deputy Director, Facilities Department  
Marine Corps Base Hawaii

Enclosures: 1. Draft NPDES Permit HI0110078 Comments  
2. Affidavit of Publication

## MCB Hawaii Kaneohe Bay WRF NPDES Permit Review

2014 FEB 27 1:33PM

### 1. NPDES Permit, Part A.2, Interim Effluent Limitations for Chlordane at Outfall Serial 001

a. According to the Fact Sheet, Page 18, the determination of reasonable potential to exceed water quality was based on 4 chlordane samples taken over the previous permit term compared against the most stringent water quality standard for chlordane of 0.00016 ug/l. A review of Hawaii Administrative Rules 11-54, indicates the 0.00016 ug/l limitation is based on the fish consumption standard for the protection of human health. According to HAR 11-54, for the protection of human health, all State Waters shall be free from pollutants in concentrations which on average during any 12 month period, exceed the "fish consumption" standard for pollutants identified as carcinogens.

Since the "fish consumption" standard was intended to be applied to an annual average, we believe there is not enough data to definitively determine reasonable potential. Although the rules may define that a single sample taken in a given year would be considered an annual average and therefore, the 4 chlordane samples obtained during the previous permit cycle could be used in a reasonable potential analysis, the accuracy of the result would be questionable at best due to the fact that each of the annual averages for chlordane was a single sample. Further since the fish consumption standard was intended to be applied to an annual average, the use of an average dilution should be used in the determination of reasonable potential vice the critical minimum dilution that was used. It is our understanding that the CCH has provided a new dilution study for the outfall which provides an average dilution for the outfall which should have been used. For these reasons, we believe the imposition of Chlordane limitations and the associated compliance schedule should not be included in this permit but we do support the increased monitoring which will allow for a more accurate calculation of reasonable potential in our next permit cycle.

b. If removal of chlordane limitations is not possible, it is proposed that the compliance schedule be extended 5 years to allow for monthly sampling of chlordane. At that time, the 5 yearly averages for chlordane could be calculated and the reasonable potential analysis could be performed. Depending on the results of this analysis, the permit may remain, as is if limitations are required and compliance cannot be immediately met, modified to remove the compliance schedule if limitations are required but can be immediately met or modified to remove chlordane limitations if limitations are not required. Extending the schedule 5 years for data collection would also serve to provide more and better information which can be used in identification and evaluation of reasonable treatment alternatives should the need for treatment be required (Item 2 of

**ENCLOSURE** (1)

the Compliance Schedule for Chlordane). As currently written, the study would need to rely heavily on the single sample yearly samples taken during the previous permit term which as explained above is extremely inaccurate and may lead to inappropriate treatment recommendations.

## **2. Fact Sheet, Part D.2.d, Chlordane**

The second paragraph on Page 20 states, "During the compliance schedule, the Permittee is required to maintain current treatment capability. Interim effluent limitations for chlordane have been established until final effluent limitations become effective. Interim limitations have been established based on effluent data from January 2008 through December 2011" It is our contention that DOH erred in its reasoning that establishing interim permit limitations based on past data would indicate that the Permittee is maintaining current treatment capability. Since the MCBH Kaneohe Bay WRF does not have a treatment process for removing chlordane, maintaining current treatment capability will not ensure levels of chlordane will not increase. For this reason it is proposed that the current interim limitation be changed to monitor only.

## **3. Fact Sheet, Part D.2.i, Enterococcus**

The third paragraph on Page 27 states, "During the compliance schedule, the Permittee is required to maintain current treatment capability. Interim effluent limitations for enterococcus have been established until final effluent limitations become effective. Interim effluent limitations have been developed based on observed effluent data over the recent permit term." It is our contention that DOH erred in its reasoning that establishing interim permit limitations based on past data would indicate that the Permittee is maintaining current treatment capability. Since MCBH Kaneohe Bay WRF does not have the capability to provide disinfection, maintaining current treatment capability will not ensure levels of enterococcus will not increase. For this reason it is proposed that the current interim limitation be changed to monitor only.

## **4. NPDES Permit, Part A.1, Effluent Limitations and Monitoring Requirements**

a. Ammonia Nitrogen Limitations - Fact Sheet, Part D.2.e, Ammonia Nitrogen - The third paragraph on Page 22 indicates that performance based effluent limitations have been established for Ammonia Nitrogen based on the best estimate of the treatment performance of the Facility for Ammonia Nitrogen. The MCBH WRF is not designed to treat for ammonia nitrogen and has little control over the level of this pollutant in the effluent. The level of ammonia nitrogen is affected more by factors such as influent levels, flow and temperature rather than the actual treatment performance of the plant in

terms of BOD and TSS removal. For these reasons, the application of performance based effluent limitations for Ammonia Nitrogen is not appropriate.

b. Nitrate plus Nitrite Limitations - Fact Sheet, Part D.2.f, Nitrate plus Nitrite Nitrogen – The second and third paragraphs on Page 24 indicates that performance based effluent limitations for nitrate plus nitrite nitrogen are established based on maximum effluent concentration over the previous term. The MCBH WRF does not designed to remove nitrate plus nitrite nitrogen and has little control over the levels of these pollutants in the effluent. The level of nitrate plus nitrite nitrogen is affected more by factors such as influent levels, flow and temperature rather than the actual treatment performance of the plant in terms of BOD and TSS removal. For these reasons, the application of performance based effluent limitations for nitrate plus nitrite nitrogen is not appropriate.

#### **5. NPDES Permit, Part A.1, Table 2, Compliance Schedule for Chlordane**

a. Item 7 of Table 2 requires submittal of a status report on compliance or noncompliance with the compliance schedule annually by January 1 and 14 days prior to each interim date. As written this would essentially require the submittal of two status reports per year except for years 3, 4 and 5. For example, if the permit becomes effective on April 1, 2014, a status report would be required by January 1, 2015 as well as March 17, 2015 and again on January 1, 2016 and March 17, 2016. Maybe this could be rewritten to require submittal of status reports 14 days prior to any interim date or January 1 for any year without an interim date but no earlier than 1 year prior to permit issuance.

b. Request written notification of compliance or noncompliance with interim dates be changed from 14 days prior to interim date to 14 days following the interim date. Per your Response to Comments, Comment 4.b, Page 4 which actually involved the compliance schedule for Ammonia Nitrogen which was the only Compliance Schedule in the previous public noticed permit, HAR 11-55-22 requires that before or up to 14 days following each interim date, the permittee provide written notice of the permittee's compliance or noncompliance with the interim dates.

#### **6. NPDES Permit, Part A.1, Table 3, Compliance Schedule for Enterococcus**

a. Item 7 of Table 2 requires submittal of a status report on compliance or noncompliance with the compliance schedule annually by January 1 and 14 days prior to each interim date. As written this would essentially require the submittal of two status reports per year except for years 3, 4 and 5. For example, if the permit becomes effective on April 1, 2014, a status report would be required by January 1, 2015 as well as March 17, 2015 and again on January 1, 2016 and March 17, 2016. Maybe this could be rewritten to require submittal of status reports 14 days prior to any interim date

or January 1 for any year without an interim date but no earlier than 1 year prior to permit issuance.

b. Request written notification of compliance or noncompliance with interim dates be changed from 14 days prior to interim date to 14 days following the interim date. Per your Response to Comments, Comment 4.b, Page 4 which actually involved the compliance schedule for Ammonia Nitrogen which was the only Compliance Schedule in the previous public noticed permit, HAR 11-55-22 requires that before or up to 14 days following each interim date, the permittee provide written notice of the permittee's compliance or noncompliance with the interim dates.

#### **7. NPDES Permit, Page 20, Part E.1, ZOM Dilution Study**

This portion of the permit requires the Permittee to conduct a ZOM dilution study within 3 years of the effective date of the permit. Our comments to the draft permit requested this item be removed since the City and County of Honolulu (CCH) is already conducting a ZOM Dilution Study on this outfall which is owned by CCH. The DOH responded, "the Permittee may independently or in cooperation with CCH, conduct the required study." Request wording be added to the permit to indicate or acknowledge that the outfall is a shared outfall and the ZOM Dilution Study can be done independently or in conjunction with CCH and that duplicate submittals are not required.

#### **8. NPDES Permit, Page 20, Part E.2, Annual Receiving Water Monitoring Programs**

This portion of the permit requires the Permittee to submit an annual receiving water monitoring report by March 31 of each year. Our comments to the draft permit explained that we do not own the outfall and pay CCH for use of the outfall and that CCH performs the water quality monitoring and reporting for the shared outfall. The DOH responded, The ownership of the outfall is not germane to the necessity to evaluate the impact of the discharge on the receiving water. The Permittee may individually or in conjunction with CCH conduct the necessary receiving water monitoring necessary to demonstrate that the discharge of effluent is not significantly or negatively impacting the aquatic life and human health within the receiving water." Request wording be added to the permit to indicate or acknowledge that the outfall is a shared outfall and the receiving water monitoring can be done independently or in conjunction with CCH and that duplicate submittals are not required.

#### **9. NPDES Permit, Page 20, Part E.3, Ocean Outfall Monitoring**

This portion of the permit requires the Permittee to inspect the ocean outfall and submit investigative findings to the Director at least once during the permit period. Our comments to the draft permit requested this item be removed since the City and County

of Honolulu (CCH) is the owner of the outfall and is required to conduct this inspection as a part of their permit. The DOH responded, "The ownership of the outfall is not germane to the necessity to evaluate the impact of the proper operation of the diffuser. The Permittee may individually, or in cooperation with CCH, conduct the necessary receiving water monitoring necessary to demonstrate that the diffuser is in good working order." Request wording be added to the permit to indicate or acknowledge that the outfall is a shared outfall and inspection of the ocean outfall can be done independently or in conjunction with CCH and that duplicate submittals on finding are not required.

#### **10. Response to Comments, Comment 4.b, Page 4**

Your response to our comment requesting that written notification of compliance or noncompliance with interim dates be changed from 14 days prior to interim date to 28 days after interim date was that HAR 11-55-22 requires that before or up to 14 days following each interim date, the permittee provide written notice of the permittee's compliance or noncompliance with the interim dates. Request written notification of compliance or noncompliance with interim dates be changed from 14 days prior to interim date to 14 days following the interim date for the compliance schedules for Chlordane and Enterococcus (NPDES Permit, Part A.1, Tables 2 and 3).

#### **11. NPDES Permit, Appendix 1**

Rather than specifying a particular Analytical Method for the various parameters, it is requested that more general wording such as "As specified in 40 CFR 136" be used. This wording was included in the City and County of Honolulu's recently issued NPDES Permit HI 0021296 for the Kailua Regional Wastewater Treatment Plant. The use of "As specified in 40 CFR 136" would allow MCBH to explore potentially more appropriate methods with less interferences or lower detection limits which may become approved by EPA during the term of this permit.

#### **12. NPDES Permit, Page 11, Part B.2, Chronic Toxicity Test Species and Methods**

MCB Hawaii believes that using Trypneustes gratilla for chronic toxicity compliance will lead to unreliable results due to Trypneustes gratilla sensitivity and inconsistent lab interpretation of the test method. MCB Hawaii WRF has consistently met chronic toxicity limitations when using Ceriodaphnia dubia, but has experienced very inconsistent results when using Trypneustes gratilla. Most recently, Trypneustes gratilla results went from consistently passing to consistently failing when a new lab began performing the test. For this permit iteration MCB Hawaii requests that Ceriodaphnia dubia be used for chronic toxicity compliance, and Trypneustes gratilla be used for chronic toxicity reporting and accelerated testing purposes only.



# AFFIDAVIT OF PUBLICATION

## IN THE MATTER OF Public Notice

2014 FEB 27 1:33PM

STATE OF HAWAII

City and County of Honolulu

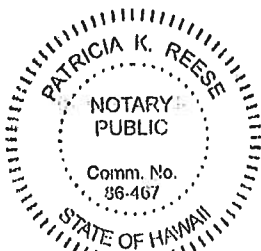
SS.

Doc. Date: JAN 30 2014 # Pages: 1

Notary Name: Patricia K. Reese First Judicial Circuit

Doc. Description: Affidavit of  
Publication

*Patricia K. Reese* JAN 30 2014  
Notary Signature Date



Rose Rosales being duly sworn, deposes and says that she is a clerk, duly authorized to execute this affidavit of Oahu Publications, Inc. publisher of The Honolulu Star-Advertiser and MidWeek, that said newspapers are newspapers of general circulation in the State of Hawaii, and that the attached notice is true notice as was published in the aforementioned newspapers as follows:

Honolulu Star-Advertiser 1 times on:

01/30/2014

Midweek Wed. 0 times on:

times on:

And that affiant is not a party to or in any way interested in the above entitled matter.

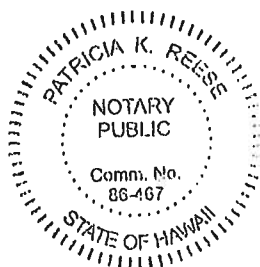
*Rose Rosales*  
Rose Rosales

Subscribed to and sworn before me this 30th day

of January A.D. 2014  
*Patricia K. Reese*  
Patricia K. Reese, Notary Public of the First Judicial Circuit, State of Hawaii

My commission expires: Oct 07 2014

Ad # 0000596920



### NOTICE OF PROPOSED WATER POLLUTION CONTROL PERMIT FOR THE MARINE CORPS BASE HAWAII KANEHOE BAY WATER RECLAMATION FACILITY NPDES PERMIT NO. HI 0110078

Docket No. HI 0110078

January 30, 2014

The Department of Health (DOH) tentatively proposes to reissue a National Pollutant Discharge Elimination System (NPDES) permit to discharge treated wastewaters to the Pacific Ocean off of Mokapu Peninsula and storm water runoff to Kaneohe Bay, subject to certain effluent limitations and special conditions, to:

UNITED STATES MARINE CORPS  
MARINE CORPS BASE HAWAII (MCBH)  
P.O. BOX 63082  
MCBH KANEHOE BAY, HAWAII 98863

The proposed permit and Zone of Mixing (ZOM) for the existing discharge will expire five (5) years from the date of issuance.

The MCBH Kaneohe Bay Water Reclamation Facility (WRF) serves a population of approximately 16,000 and is located at Building 0829, MCBH Kaneohe Bay, Island of Oahu, Hawaii, TMK: (1) 4-4-008:001. The facility is a 2.0 million gallons per day capacity secondary treatment plant using a trickling filter and polishing pond. The influent is primarily domestic wastewater with minor industrial discharges. Treated effluent is discharged to the Pacific Ocean off of Mokapu Peninsula, through Outfall Serial No. 001, at Latitude 21 27'32"N and Longitude 157 42'56"W. This joint outfall is also used by the Kailua Regional Wastewater Treatment Plant and extends approximately one (1) mile off Mokapu Peninsula to a depth of 105 feet. The existing ZOM for the City and County of Honolulu's Kailua Regional Wastewater Treatment Plant will also be the ZOM for the MCBH Kaneohe Bay WRF. The facility is also capable of routing reclaimed wastewater to the Kilpper Golf Course for irrigation.

Due to the natural contours of the facility topography, storm water from the facility naturally flows to the southwest corner of the facility. A rain event of significant intensity may create storm water runoff from this area where it would discharge to a wildlife sanctuary and subsequently to the Pacific Ocean at Kaneohe Bay from Outfall Serial No. 002, at Latitude 21 26'17"N and Longitude 157 45'34"W.

The receiving waters include the Pacific Ocean off of Mokapu Peninsula, which is designated as a Class A, Open Coastal Marine Water under Hawaii Administrative Rules (HAR) Section 11-54-3(c)(2), and possibly Kaneohe Bay, which is designated as a Class AA, Marine Water, Embayment under HAR Section 11-54-3(c)(1).

Persons wishing to comment upon or object to the proposed NPDES permit or to request a public hearing, should submit their comments or requests in writing no later than 30 calendar days after the date of this notice, either in person or by mail, to:

Clean Water Branch  
Environmental Management Division  
Department of Health  
919 Ala Moena Boulevard, Room 301  
Honolulu, HI 96814-4920

Copies of the proposed public notice permit and other information are available for public inspection, Monday through Friday (excluding holidays) from 7:45 a.m. until 4:15 p.m., at the DOH office address shown above. Copies may be bought. The public notice permit and rationale are also available on the Internet at: <http://health.hawaii.gov/cwb/site-map/home/public-notices-and-updates>. For more information or if you have special needs due to disability that will aid you in inspecting and/or commenting on the public notice permit and related information, please contact Mr. Darryl Lum, Supervisor of the Engineering Section, Clean Water Branch, at the above address or (808) 586-4309 (Voice) at least seven (7) calendar days before the comment deadline. For those who use a TTY/TDD, please call through Sprint Relay Hawaii, at 1 811 or 1-877-447-5991.

All comments and requests received on time will be considered. If DOH determines that there is significant public interest, a public hearing may be held after at least 30 calendar days of public notice.

If DOH's position is substantially unchanged after considering all timely written comments and all oral comments at any public hearing that may be held, then the DOH will issue the NPDES permit and this action will be final.

Please notify anyone you know who would be interested in this matter.

GARY L. GILL  
Acting Director of Health  
(SA596920 1/30/14)

ENCLOSURE (2)